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CASES OF CÆSAREAN OPERATION.

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It is to be regretted, that although the records of surgery furnish a greater number of successful cases than those of a less fortunate nature, still it not unfrequently happens that adventitious circumstances occur in surgical operations, which, when concealed from public notice, become of no avail to science, but if allowed publicity might prove eminently beneficial to the advancement of our art, and ultimately tend to the alleviation of human misery.

Governed by these considerations, that a faithful though unfortunate narrative would frequently prove most instructive to the practical surgeon, I have been induced to present the following case of Cæsarean operation for insertion in the *London Medical and Surgical Journal*.

Mary, the wife of Edmund Forrest, residing about three miles from Blackburn, was a poor decrepit woman, in the thirty-fifth year of her age, who had suffered greatly from an accession of rheumatic pains of the loins for a number of years, which eventually produced a state of malacosteon and deformity, which rendered her unable to walk without support for the last three years of her existence. She also labored under anasarca, with an ulceration of the lower extremities, troublesome cough, and difficulty of breathing.

Unfortunately in this situation she became pregnant of her fifth child, and at the expiration of the period of utero-gestation she was seized with labor pains, and Mr. Cocker, pupil to Mr. Pickop, surgeon of this town, was called to attend her on Monday, the 21st of August, 1826. Mr. Cocker staid with her all night, and occasionally made the necessary examinations to ascertain the progress of labor and position of the fœtus, but found to his surprise the apertures of the pelvis so unusually distorted, that he concluded she could not be delivered in the ordinary way, though the pains were rather strong and frequent.

The following morning (Tuesday), Mr. Pickop visited her; at this period labor had made little progress, the liquor amnii had not escaped, though the pains were more powerful than before, and the woman's sufferings greatly aggravated by a distressed breathing, a quick and irregular pulse, scarcely numerable, together with obvious constitutional debility.

On a strict examination per vaginam, the distortion of the apertures of the pelvis appeared to Mr. Pickop so contracted, that he was unable to attain a knowledge either of the state of the os uteri or presenting part of the fœtus. An aperient clyster was administered, and Mr. Pickop left her, with strict injunctions to be sent for on the advance of labor.

In the course of a few hours he was recalled, and on his way solicited my assistance on the case; we set out together, and arrived at the patient's dwelling about nine o'clock the same evening, and found her laid on a bed, with her head and shoulders supported by her husband, gasping for breath, and apparently in a dying state. On seeing me she earnestly begged that I would release her from her misery, as she could not live long in her present situation.

Without delay I made the necessary examination, and soon discovered the deformity of the pelvis and impediments to delivery in the natural way, to be as had been stated to me previously by Mr. Pickop; and though I took much pains to ascertain the situation and state of the os uteri, as well as position of the fœtus, by making pressure on the abdominal region with one hand, while the index finger of the other was employed in the vagina, yet I could not, even by this manœuvre, attain my object, owing to the evident distortion of the pelvic apertures and pendulous state of the abdomen—yet during this research I was enabled to predict the living state of the fœtus by the motion conveyed to the hand through the medium of the uterine and abdominal parietes. The woman's pulse was irregular, and too quick to be enumerated; her breathing oppressed and interrupted, attended with rattling of the throat; and countenance exhibited a ghastly appearance, all of which symptoms indicated approaching dissolution, and from Mr. Pickop's account were greatly aggravated since he left her in the morning.

In this perilous state a question arose, whether to have immediate recourse to the Cæsarean section, or abandon any further interference in the case. But, on being urged to the operation by the supplications of the woman and her attendants, and knowing the fœtus to be alive, I more readily yielded to their entreaties, believing it to be a professional duty rather than sacrifice the child by unnecessary delay and timidity.

The management of the case having been resigned to me, I had the woman removed from the bed and laid on her back upon a table, with her head and shoulders slightly raised with pillows, to assist her breathing; and while the requisite dressings, &c. were preparing, Mr. Pickop introduced the catheter into the bladder and evacuated its contents.

I commenced the operation about two inches above and a little to the left of the umbilicus, by making an incision in a longitudinal direction to the extent of six and a half inches, and parallel with the fibres of the linea alba, through the distended parietes of the abdomen, which were very thin. The peritoneum being laid bare, a small opening was next made therein, which admitted the point of the finger, and served as a director to the probe-pointed bistoury, by which this membrane was divided upwards and downwards, to the full extent of that of the integuments. The uterus next arrested my attention, and was divided in the same way and to the corresponding extent, and its parietes were observed not to exceed in thickness the edge of a half-crown in any part of the incision.

A portion of the placenta was found adhering to this part of the organ, and its membranes being ruptured with the fingers, the liquor amnii was allowed to escape by the abdominal wound rather than become diffused among the intestines. An incision was then made through the vascular

substance of the placenta, which exposed the left shoulder of a female infant to view, with its head situated at the fundus uteri; the child was extracted alive, and on the funis umbilicus being tied and divided, it was resigned to the care of a female attendant.

The placenta and membranes were then detached from their connections and extracted without difficulty, and the uterus contracted as speedily as is usual in ordinary deliveries, and the incision became nearly closed; consequently there was very little blood lost during the operation, except what escaped from the divided edges of the placenta whilst attached to the surface of the uterus.

This part of the operation occupied only a few minutes; but the joy produced on the occasion excited great agitation of the system, with laborious breathing, and a considerable portion of the bowels became forced through the abdominal wound, though every effort was exerted to retain them in their place.

During this interval the poor woman seemed almost exhausted, but having a little wine allowed her, the breathing and throbbing of the chest became more tranquil, which greatly aided our efforts in replacing the intestines *in situ*, on which she gratefully expressed her thanks at the event of the operation.

Mr. Pickop now supported the sides of the abdomen with the palms of his hands, and pressed the incised edges of the integument in contact, whilst I secured them by means of several sutures placed about an inch apart, over which were applied pledgets of dry lint and strips of adhesive plaister, and the whole surface was finally protected by a broad bandage passed a few times round the body so as to keep the abdomen and its contents steady, and the interrupted sutures from being too much extended.

Her pulse, which before the operation could not be distinctly counted, had now subsided to 108, with the breathing less laborious and mind more tranquil. Twenty-five drops of tinct. opii were given in a little wine, after which we left her about eleven o'clock to the care of her sister, with strict injunctions to be kept quiet, and such regimen allowed as her condition required.

The following morning (Wednesday), Mr. Pickop visited her, and was informed she had passed an easy night, and slept at intervals. The bowels being constipated, an aperient enema was administered, but without much effect. She had passed urine freely.

Mr. Cocker saw her in the evening; pulse regular, and about 110, and she was free from pain or fever. On Thursday morning I called upon her, and she said she had got some refreshing sleep during the night, and appeared cheerful and communicative.

The temperature of the skin was not increased, and there was a slight moisture: pulse 110, firm and regular; tongue moist and perfectly free from fur; she nevertheless complained of thirst and sickness, with occasional vomiting. The bowels not having acted since the operation, the clyster was repeated, but without effect. I prescribed a saline mixture, a dose of which to be taken at short intervals in the act of effervescence, and eight grains of calomel made into pills with two drops of croton oil, which soon produced several copious evacuations. I now removed the

superficial dressings from the wound, together with each other strip of adhesive plaister so as to inspect the healing process, and was pleased to find that the incision of the integuments was completely united, and the dressings dry and scarcely stained with discharge from the part.

The abdomen felt on pressure rather tense, but did not excite pain; the lochial discharge was uninterrupted, and appeared in every respect as is usual after natural parturition.

On Friday morning she was visited by Mr. Cocker, who was informed that she had passed a quiet night, her pulse 115 in the minute; tongue moist and clean; breathing more laborious than before; urine evacuated naturally, and in sufficient quantity.

In the evening Mr. Pickop saw her, when she was evidently much changed, with pulse 160 in the minute; great tremor and distressed breathing; thus she passed a restless night, and died about eight o'clock the following morning (Saturday), being rather more than three whole days subsequent to the operation. It is now nearly seven years since the operation was performed, and the child is at present enjoying a good state of health.

It is necessary to remark that this case of Cæsarean section excited among the surgeons of our dispensary a groundless suspicion of its having been unnecessarily performed, in consequence of which the body was clandestinely disinterred, and the following is a correct copy of the report taken down in writing, by a medical pupil during the dissection, and the dimensions of the pelvis (which is now in my possession) will convince any one who reflects on the space allowed for the passage of the fœtus, that the operation was in this instance imperatively called for. The deformity of the pelvis in the instance previously related, it may be necessary to state, was produced by malacosteon.

Post-mortem examination of the body five days after death.—The abdomen was not unusually distended, and the muscles had apparently regained their natural form. From the violence used in removing the body from the grave to the place of dissection, the wound in the integuments of the abdomen was slightly separated, and there was every appearance of its edges having been recently lacerated.

On removing the sutures and extending the incision, the intestines and uterus were exposed, upon neither of which was there the slightest mark of inflammation.

The peritoneum was not at all inflamed, but on the contrary was very pale, as were also the intestines.

The uterus was remarkably small and contracted; the incision in this organ was scarcely two inches in extent; its edges, three quarters of an inch in thickness, were in perfect apposition, and had so firmly united that it required considerable force to tear them asunder. There was, perhaps, an ounce of coagulated blood effused upon that part of the peritoneum which was in contact with the wound in the uterus; it was evidently undergoing the process of absorption. The liver was very small, and the gall-bladder was greatly distended with about thirty stones of various sizes.

It is worthy of remark, from the appearances of the uterus, as stated on dissection, that in all probability this woman would have recovered, had she been afflicted with no other disease than malacosteon.

Diameters of the superior apertures of the pelvis.—The transverse diameter measures 4 5-8 inches, taken from one sacro-iliac symphysis to the other.

The distance from the right acetabulum to the projecting lumbar vertebra, is only half an inch.

The distance on the opposite side, one inch and a quarter.

The largest circle that can be formed in any part of the superior aperture does not exceed one inch and a half.

The antero-posterior, or sacro-pubic diameter of the brim, is two inches.

The coccy-pubic, or long diameter of the outlet, is two inches and a half.

The bis-ischiatic, or short diameter from one tuberosity of the ischium to the other, is two inches.

[Lest the "previous instance" referred to on the last page should not have come to the knowledge of our readers, we shall append it to the foregoing.]

Jane Foster, of the village of Blackrod, was in the 40th year of her age, of a robust constitution, and mother of several living children.

She had the misfortune, on returning from Wigan market, to fall from a loaded cart, the wheel of which passed over her pelvis as she lay on her back. The injury she sustained from this accident made confinement to her bed necessary for about six weeks. She was attended on this occasion by the late Mr. White, of Manchester, Mr. Hawarden, of Wigan, and some others.

From inquiry of Mr. Hawarden, I learned that one of the ossa ilei was fractured, and much injury done to the whole pelvis, particularly to the ossa pubis. This information was confirmed to me afterwards by Mr. White, in a conversation I had with him on the subject. The woman being then in great misery from the accident, was very averse to an accurate examination, yet the above statement seems highly probable, both from an irregularity at the part, and from the elevation of the head of the thigh-bone, on the left side. This produced a shortening of the limb, and of course a limping.

Soon after her recovery from this injury she became pregnant, and on Friday, Nov. 22nd, 1793, she was seized with labor-pains, being then at the full period of utero-gestation.

The midwife, who attended her in her former labors, was sent for on this occasion; but having waited with her several days, without the least prospect of delivery, she thought it advisable to have more assistance, especially as the waters were discharged on the second day of the labor, and no part of the child could be ascertained to present within reach. On Tuesday the 26th, I was desired to meet Mr. Hawarden, of Wigan, upon a consultation on this case, but, arriving a little before him, I examined the parts per vaginam, and was extremely surprised to find that I could barely pass my finger between the ossa pubis and the last lumbar vertebra, so great was the narrowness at the brim. Besides this, the outlet was so much contracted, that it was with some difficulty I could introduce three fingers at that part. [The nurse denied that the patient had received any injury; she assured Mr. Barlow that the woman had children before without any operation, and some were in the apartment.

He was greatly surprised at this statement, and, on retiring to an adjoining apartment, he overheard the nurse observe that he ought to be told the truth, or he would leave, as the two practitioners who had preceded him had done.]

After asking some questions, I was informed of the accident. This information induced me to repeat my examination with more exactness, in order the better to ascertain the precise dimensions. Having introduced my finger again, I perceived a very evident depression of the ossa pubis, with a protuberance in a direction somewhat more towards the hollow of the sacrum, than in an exact line with the last lumbar vertebra. From this I was led to suspect that there had been, besides the fracture, a separation at the symphisis pubis, and that the protuberance just mentioned was the consequence of a deposit of bony matter at the separated part: and some idea may be formed of its quantity, from knowing that it projected to within half an inch of the os sacrum. With some difficulty I carried up my finger sufficiently high to judge concerning the degree of dilatation of the os uteri, which appeared to be considerable, as far as I could judge from feeling its anterior edge, which was thin and flabby; but no part of the child was within reach.

Her pains had left her the night before; her anxiety was very great, her pulse full, and respiration difficult. This last symptom was moderated by the loss of ten ounces of blood from the arm.

On conversing with Mr. Hawarden, he concurred with me concerning the nature of the case, and the impossibility of bringing the child away by the natural passage. Some little conversation passed on the propriety of a division at the symphisis pubis, but it appeared to us both that the narrowness at the brim was too considerable to allow much advantage from such an operation, therefore that project was soon abandoned. The only alternative was the Cæsarean Operation; but the well-known danger of this induced Mr. Hawarden to decline taking any part in it, and he immediately returned home.

Convinced, therefore, of the impossibility of effecting delivery by any other means, it was proposed to her attendants, but was not then assented to. Indeed the idea seemed so dreadful that I did not urge it much, especially when I recollected that of the nine or ten instances then on record, in which that operation had been performed in this country, not one had furnished a voucher for its success. In this forlorn and dangerous situation she was left to the care of the midwife, and desired to make up her mind as soon as possible concerning the operation.

On the morning following (Wednesday 27th) [5th day of labor], I was again sent for, and found her lingering in the same situation.

Note.—[30th. Sitting up eating cockles with her children, contrary to Mr. B.'s directions.]

She consented to the operation without the least hesitation. I immediately called in an assistant in the operation, Mr. Haywarden, a practitioner in the village (Blackrod), and brother of Mr. Hawarden, of Wigan, before mentioned.

The patient being taken out of bed, and placed upon a table, lying on her back, with her head raised by pillows, I began by making a longitudinal incision, five inches and a half in length, as high as the navel, pa-

rallel to the linea alba, and about two inches to the left of that line. [Transverse incisions are better, as healing better.]

The integuments and the left rectus muscle being cut through, a small opening was made through the peritoneum at the upper part; and by means of a probe-pointed bistoury, this membrane was dilated to the same extent as the external parts.* The uterus was now exposed to view, and an incision of the same length was continued through it. The child presented with its breech, and was extracted through the artificial opening, but unfortunately was dead, yet did not show any material signs of putrefaction. The placenta and membranes were then extracted with the greatest ease through the wound. The uterus was very thin, scarcely exceeding that of the peritoneum, and equally so through the whole extent of the incision. No attempt was made to examine the pelvis from the abdominal wound. The hands of a female assistant were applied on each side of the abdomen, to prevent the admission of external air, and to press out any blood that might be diffused among the intestines, after which the sides of the wound were brought together and secured by seven sutures, over which slips of adhesive plaister were applied, and the dressing completed by a few turns of a flannel bandage round the body.

The peritoneum was not included in the sutures, and no part of the viscera protruded during the operation, neither were there any bloodvessels divided, which required to be secured by ligature. It was a fortunate circumstance that no hæmorrhage followed the extraction of the placenta, as was to be apprehended from an atonic condition of the uterus, the effect of long distension. The womb contracted properly, the lochia were about the usual quantity, and continued as in other cases. The poor woman scarcely complained during the operation, so great was her fortitude. Soon after she was put into bed, and slept without taking any medicine for that purpose, and passed a good night. On the 29th she complained of a fulness about the region of the stomach, with an inclination to vomit, and on laying my hand on the abdomen a degree of tension was distinguishable. Her tongue had a whitish appearance, and her pulse was about 120. A laxative clyster was administered with the desired effect, and the painful tension of the abdomen yielded to the stimulating effects of a blistering plaister. In short, all the symptoms which had before indicated irritation, now suffered a very obvious remission. Four days having elapsed since the operation, it was thought eligible to remove every other suture; on the sixth the remaining ones were taken away, and the wound appeared perfectly healed [by the first intention].

Though she had had a nurse to her other children, she experienced no uneasiness in her breasts on the present occasion. Her health continued in an improving condition until December 4th, when it received some interruption for a few days from a diarrhœa, but which was checked by an astringent mixture. On the 10th she ventured out of bed, on the 17th she began to attend to her domestic employment, and at the end of a fortnight she went to her church, from which time to the present,

* It may be requisite to state, that at the commencement of the operation Mr. Hawarden was suddenly seized with a violent fit of syncope, which wholly incapacitated him from attending to the steps of the operation, and having no other professional person present, I was obliged to be assisted by a female attendant.

1822 (an interval of 28 years), she has had a good state of health, menstruated with regularity to the usual period of life, but never has been pregnant. [This woman died about the year 1826.]

London Medical and Surgical Journal.

SCIRRHUS OF THE SUPERIOR PORTION OF THE ŒSOPHAGUS.

M. G. æt. 46, had been suffering for four or five years from an affection of the throat, for the relief of which all remedies had been unavailing. She was of a highly susceptible and nervous temperament, and was at times subject to slight attacks of hysteria. The sound of her voice betrayed the presence and irritation of a foreign body in the throat, keeping up a spasmodic action of the muscles of the part, which, when controlled, caused no pain on pressure being made over the anterior and lateral parts of the neck.

Her nights were sleepless from the constant desire to cough up the mucus, deposited on what she supposed was the seat of the affection, the irritation of which was always greater when she lay down to rest. On examining the interior of the mouth, the mucous membrane covering the velum, palate, and pharynx, was found inflamed, but not sufficiently so to form the sole cause of the affection. There was no tumor to be seen or felt on the external surface of the larynx. Pressure over these parts gave no pain. The sound of the voice was not remarkably altered; she could raise or depress it without causing much cough, or spasmodic action, which would not have been the case if the larynx had been at all implicated in the affection. She had been bled generally and locally: counter-irritation had been employed over the affected part, and she used gargles of various kinds without any relief. A seton in the neck had been proposed, but to this she would not submit. It was then determined to try the effect of blowing fine alum powder into the throat, which considerably increased all her former sufferings. The expectorated mucus was slightly tinged with blood, which had not been remarked before using the alum powder. A seton was now made in the neck, which, after discharging for a month, had afforded no relief, and which was therefore dried up. The power of performing deglutition had greatly decreased, and she could, with difficulty, swallow fluids, which caused great irritation. This difficulty increased daily, and the body wasted in proportion from want of nourishment.

An œsophagus tube was endeavored to be passed into the stomach, but was found impracticable.

She now placed herself under the care of another medical man, but he was unable to relieve her, and she died.

Autopsy.—The lungs were healthy; the mucous membrane of the bronchiæ, larynx, velum palati, and pharynx, presented slight traces of phlogosis; the sub-mucous cellular tissue was slightly infiltrated; the trachea contained a small quantity of viscid mucus, but the harder textures of the larynx were in their normal state. At the upper part of the œsophagus was a scirrhous tumor about three inches in length; it was cylindrical in shape, and formed in the muscular structure of the part;

its thickness was from four to five lines posteriorly, and somewhat less anteriorly; it had grown from without inwards, and had so narrowed the calibre of the œsophagus, that a director could scarcely pass. The mucous membrane immediately around the tumor presented no traces of disorganization, and there was no exterior adhesion between the scirrhous tumor and the surrounding tissues. At the upper portion of the tumor there were three or four irregular and ulcerated excavations, having a cancerous appearance; these probably had been caused by the use of the alum. The tumor was of a cartilaginous consistence, and of the color of the white of an egg. The pectoral portion of the œsophagus was in a normal state. The appearance of the body generally was that of extreme marasmus.—*Gazette Médicale.*

LIFE SUPPORTED THROUGH THE MEDIUM OF THE PNEUMO-GASTRIC NERVE.

To the Editor of the Boston Medical and Surgical Journal.

Sir,—Although the following case may not be pre-eminently instructive, I have thought (as I have seen nothing of the like nature published) that it might not be altogether uninteresting to some of the numerous readers of your valuable Journal, inasmuch as it developes the organs directly and immediately concerned in the production and support of life; and as it also (in my opinion) decides in some measure the contradictory hypotheses of physiologists in relation to which organ, the brain or the spinal marrow, is first formed in embrio, and consequently which is the most immediately essential to life.

Some have maintained that the brain is an elongation of the spinal marrow, on the ground that animals have been born acephalous, thereby showing the spinal marrow to be first formed; while others have advocated the opposite theory, which, I think, is confirmed by the following case.

Case.—E. D., aged 50, a man of hale constitution and robust, in making an effort to scale a board fence, was suddenly precipitated backwards to the ground; striking first upon the superior and anterior portion of the head, which luxated the dentatus anteriorly on the third cervical vertebra. He was at length discovered, and taken in (as the patient said) after he had lain nearly an hour, in a condition perfectly bereft of voluntary motion; but being present I did not even suspect that the power of sensation was also gone, until the patient (whose speech remained almost or quite perfect, and who was uncommonly loquacious at that time) said, did he not know to the contrary, he should think he had no body. His flesh was then punctured, and sometimes deeply—even from the feet to the neck; but the patient gave no evidence of feeling, and when interrogated, answered that he felt nothing; "and," added he, "I never was more perfectly free from pain in my life," but he remarked that he could not live, and accordingly sent for his family, twelve miles distant, and arranged all his various concerns in perfectly a sane manner.

The head was thrown back in such a position as to forbid his seeing his body. The pulse were much more sluggish than natural. Respiration and speech but slightly affected, but were gradually failing; but he

could articulate distinctly until within a few minutes before his death. All the senses of the head remained quite perfect to the last. He died forty-eight hours after the fall.

Repeated attempts were made to reduce the dislocation, but the transverse processes had become so interlocked that every effort proved abortive. There was, undoubtedly, in this case, a perfect compression of the spinal marrow, which prevented the egress of nervous influence from the brain, while the pneumo-gastric nerve remained unembarrassed.

Yours respectfully, A. J. SPENCER.

Ticonderoga, N. Y. April 4, 1834.

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BOSTON, APRIL 23, 1834.

DANGER OF GIVING OPIATES TO CHILDREN.

It is remarkable, when we consider with what unguarded rashness medicines containing opium are given by mothers and nurses to young children, that fatal accidents do not more frequently occur. One instance, indeed, in which death resulted from an over dose given by mistake, took place in this city not long since. But from the very considerable quantities of paregoric which are frequently administered, we should be inclined to infer that the instances in which narcotism has followed from a very small quantity, were either not known or not sufficiently appreciated. We have before us some remarks which bear directly on this point, and containing facts which ought to be generally known. They were originally published in a popular English periodical, entitled "The Doctor."

A grain and a half of Dover's powder, which contains hardly 1-6 of a grain of opium, or even one grain of this powder, has sometimes caused extreme anxiety for the safety of children of eight months old.

A lady was accustomed to give her children, when they were indisposed, a table-spoonful of a mixture of which each spoonful contained 1-6 of a drop of laudanum, that is a sixth of a twentieth, or 1-120 of a grain of opium. One of the children had taken in this manner, at different times, for slight affections, nearly an ounce of the mixture in the first six weeks of existence. The infant fell sick a second time, and the mother gave it a spoonful in the morning and another in the evening. After three spoonfuls taken in twenty-four hours, making 1-40 of a grain of opium, the symptoms of narcotism were developed to a degree which alarmed both the parents and the physician. By the proper employment of stimulants and great care, these symptoms by degrees yielded and the child recovered.

This shows to what extent children are susceptible of narcotism from the use of opium, and how much more practitioners should be on their guard when administering this article to such delicate subjects: it proves, moreover, that a certain state of disease will bear the use of the remedy without inconvenience, to an extent which a succeeding attack, though apparently similar, will not justify. Although this child had borne a considerable quantity of the opiate without inconvenience, he was unable a short time afterwards to bear one much more feeble; and thus the pre-

ceding tolerance of the therapeutic agent, furnished no certain indication for the actual power of resistance possessed by the system at the time.

ERYSIPELAS OF INFANTS.

The following observations on a disease, not unknown among us, the erysipelas of infants, are obtained from Siébold's Journal, a German periodical devoted to midwifery and the diseases of women and children.

The methods of treatment of this affection have till now been very different and often contradictory. The greater part of practitioners argue that this malady is most frequently mortal; happily it is very rare in practice, many physicians having never met with it. It is especially when occurring in large establishments and under an epidemic form, that this disease becomes formidable; for sporadic erysipelas is easily cured under the influence of mild and expectant treatment.

In the erysipelas of new-born infants nature does much for the cure; too active treatment would have the inconvenience of disturbing the crises which take place naturally; and the general principles of therapeutics which direct us not to act with too much precipitation in the maladies of children, except in some particular cases, such as croup, have here an especial application. If nature herself does not produce diarrhœa, it is well to administer some gentle laxative. Diaphoretics are not necessary; it is sufficient that the little patient be well covered. The addition of very moderate anodynes will sometimes be necessary. Baths, and in general external humid applications, must be prescribed as in the erysipelas of adults. Some authors have advised, in the disease which occupies us, always to employ stimulants; but these can only be needed when the disease has a nervous and spasmodic character. In fine, when the general symptoms appear to announce that the erysipelas is symptomatic of an affection of the digestive passages, and particularly of the biliary organs, we must proceed therapeutically in accordance with this diagnostic.

COPPER IN VEGETABLES.

Some experiments recently made by M. Farzeau, in France, have demonstrated the presence of this metal in the vegetables used as food. These experiments have been made with so much accuracy as to demonstate the actual weight of the copper in each plant. The examinations show the proportion to be a few milligrammes of copper for each kilogramme of the plant. Wheat contains 4.666 milog. of copper for the kilog.—flour only 0.666, but the copper is contained in the bran and not in the farinaceous portion, so that the bread made with the coarsest flour is that which contains the largest proportion of the metal. M. Farzeau, indefatigable in his researches, wished to ascertain the quantity of copper which, in a given time, a man would mix with his bread. According to his calculations, a man would eat, in the course of fifty years, 6.09 grammes—a very small quantity, in truth, and which could produce no injury. The quantity of bread daily consumed in France being 18 millions of kilogrammes, there would be consequently 10 kilog. of copper eaten daily, or 3650 per year. On the other hand, since the amount of wheat necessary to feed France for a year, is nearly 7600 millions of kilog., it results that this quantity of wheat takes from the soil 34061 kilogrammes 800 grammes of copper—an enormous quantity, which equally proves the abundance of copper in the soil, and its extreme minuteness of division.

POSITION OF THE FŒTUS IN BIRTH.

Among the grave questions which have served to occupy the attention of the learned, the following was brought before the notice of the French Academy of Sciences, by M. Dubois, during the last year: Does the peculiar position which the fœtus assumes at the conclusion of labor, take place in virtue of gravity or by some different principle? By writers on midwifery generally, this phenomenon has been attributed to the superior weight of the head. Monsieur D. finds, however, that the cephalic and pelvic extremities of the fœtus exactly balance each other. He has also ascertained that, although the presentation of the head is almost constant at nine months, it is very much less so when the labor is premature. In 80 fœtuses which presented under his care with seven months labors, nearly half presented the pelvic extremity. The conclusion, therefore, at which he arrives, is, that the fœtus is led to present the head rather than the pelvis by a sort of instinct. The discussion on this subject is stated to have been one of considerable interest, but we can with difficulty conceive of a more unprofitable speculation. The sublime and the ridiculous are not perhaps more nearly allied in composition, than are the profound and the absurd in philosophy.

DR. HECKER ON BLOOD-BATHS: AN HISTORICAL NOTICE.

According to a dark tradition which is incidentally mentioned by Pliny, the ancient kings of Egypt used to bathe in human blood when they were seized with leprosy. A similar story is told of the emperor Constantine: but he seems to have been restrained from employing this revolting remedy in consequence of a vision; and he is said to have been cured by baptism. No great weight can be attached to these ill-authenticated stories; yet it is but too true, that, both in ancient times and in the middle ages, decided healing virtues for the cure of leprosy were supposed to exist in the blood of innocent children and virgins, and that occasion was given thereby for numberless cruelties. It is needless to refer here to the remoter traces of the belief in the expiatory or healing properties of pure blood; they ramify far, and pass into the most ancient times. Cures of leprous people by the blood of animals, in employing which certain symbolical customs were observed, are mentioned in the books of Moses; and it might not be difficult to discover similar forms among all the nations in the world. During the middle ages the delusion about the healing virtues of human blood, which must have had horrible effects in the great plague of leprosy, received a check from the impression that only the blood of those children and virgins would prove efficacious, who offered themselves freely and voluntarily for a beloved sufferer. This idea is particularly expressed in the touching story of "Poor Henry," which forms the subject of one of the most beautiful poems of the thirteenth century. A Suabian knight, who sits in the lap of happiness, is seized with the leprosy. In order to escape *civil* death, he seeks through the world for help. The physicians of Montpelier can give him no assistance: he hastens to Salernum. Here one of the Masters makes him acquainted with the apparently hopeless means of cure. Sad at heart, he returns home, and prepares himself to sorrow out the remainder of his days in solitude. A girl of twelve years of age, the daughter of a countryman, conceives a passion for the unfortunate knight, attends him affectionately, and, upon accidentally hearing of the freewill offering, cannot be dissuaded from her resolution

to purchase the recovery of her master with her life. Both set out for Salernum, but the catastrophe is not fatal: Henry gets rid of the leprosy, and rewards his generous benefactress with marriage. The story of Amicus and Amelius is another of the same sort, which affords no less ground for concluding that the superstition of which we speak was scarcely disbelieved in any quarter.

In connection with this, we should not omit to place the story which is told of Louis XI., that he had a mind to evade his approaching death by the use of the blood of children. Klinger has employed the incident to exalt the horrors of his tremendous version of Faust: and Sprengel, too, has given it credit, and has even spoken of the actual baths having been used. But it is by no means a well-authenticated circumstance, for we cannot discover a trace of it in any truly trustworthy source. The physician, however, to whom the bloody ordinance is charged, is an historical personage: he is no other than the notorious Jacques Cotier.

Medicinische Zeitung of Berlin.

Prophylactic Property of Belladonna.—At Monastir, in 1829, scarlatina raged, both among our troops and the inhabitants of the towns and villages where we were quartered. The grand vizier, who had expended much time and money on the discipline of this his favorite *corps d'armée*, gladly accepted the proposal of Dr. Oppenheim to try the effects of belladonna. As the troops were generally very young men, and totally unaccustomed to narcotics, the dose he gave was comparatively small: thirty-six grains of the extract of belladonna were mixed up with one pound of the extract of liquorice, and ten grains of this were given morning and evening to each soldier. The success of the experiment far succeeded his most sanguine expectations, for not more than twelve men, out of twelve hundred, sickened after this plan was adopted. Of these twelve, six died; and it is to be remarked, that the disease continued unabated among the inhabitants where the soldiers were quartered, after it had ceased among the latter, although they lived in the same houses.

Edin. Phil. Jour. and *Monthly Arch. of the Med. Sci.*

Changes in the Blood.—Dr. Wm. Gregory and Mr. Irvine have lately made some experiments to ascertain the circumstances under which the blood changes in color, from the dark venous to the florid arterial hue.

Dr. Stevens first showed that the venous clot, deprived of its serum by washing, remained dark even when in contact with oxygen; and that the addition of a saline solution caused it immediately to become florid. He stated, also, that a strong saline solution would cause this change in an atmosphere so highly charged with carbonic acid as to prove rapidly fatal to animals.

It appeared to the authors necessary to ascertain whether this effect took place in pure carbonic acid, containing no free oxygen, as the atmosphere used by Dr. Stevens most probably did; and they also proposed to extend their observations to other gases, likewise free from oxygen. They accordingly prepared pure nitrogen, hydrogen, and carbonic acid, removing the least traces of oxygen by means of potassium. The water with which the clot was washed, and the saline solution used in the experiments, were deprived of atmospheric air by being boiled and allowed to cool in close vessels. The clot was then introduced into the gases

over mercury, and as soon as the strong saline solution came in contact with it, the color, in all the three gases, changed from black to bright red, and the same change was found to take place in the Torricellian Vacuum. It was obvious, therefore, that a strong saline solution could change the color of the blood from venous to arterial without the contact of oxygen, or indeed of any gas whatever.

But in blood, the coloring matter is in contact, not with a strong saline solution, but with a very dilute one, viz. the serum. It was necessary, therefore, to see whether the washed clot, placed in contact with serum or a weak solution of salt, in the same gases, would change its color. On repeating the experiments, both with serum and a solution of salt in water of equal strength to the serum, no change whatever took place, until atmospheric air or oxygen gas was admitted.

The conclusions of Dr. Stevens, therefore, must be somewhat modified. It is true, as he states, that the presence of saline matter is essential to the change of color : but it is obvious that there is an essential difference between that change, as it occurs in the lungs, where serum is present, and as it appears out of the body, when a strong saline solution is employed. In the former case, oxygen is necessary ; in the latter, the change of color is independent of the presence of any gas whatever. We must, therefore, be cautious how we reason by analogy from the one class of phenomena to the other.—*Ibid.*

Idiotcy produced artificially in Children and Adults.—Although insane persons are not so rare in Turkey, naturals and idiots are not so unfrequent ; and occasionally idiotcy is produced in children artificially, by means of giving the child small doses of narcotics from its very infancy ; a practice which, by stupifying the sensorium, prevents the mental development, and ends by producing a state of fatuity. This is an extremely curious fact, and I believe that Dr. Oppenheim is the first who has given us authentic information upon the subject. This practice of rendering persons idiotic is the source of great emolument to some ; and Dr. Oppenheim says that it is carried into effect, not merely upon children, but upon adults, when it is judged necessary to render them incapable of conducting their affairs, while, at the same time, their removal by death appears, for certain reasons, impolitic and inexpedient.—*Ibid.*

Patent Mode of Manufacturing Sulphate of Quinine.—Messrs. Pelletier and Desprez have taken out a patent for making the sulphate of quinine, by means of distilled or expressed oils instead of alcohol. Their process is the following :—"Where distilled oil is intended to be used, the bark having been treated by acids, and having precipitated the quinine and the other dissoluble matters in the acid, by means of lime, in the usual method used in making quinine, the calcareous precipitate is to be dried, and reduced to a fine powder ; it is then treated several times, say seven or eight, with the oil intended to be used ; and from my experience, I have found turpentine oil to answer the best, which is done in appropriate vases, or other fit vessels found best calculated to answer the object. The oil is then to be separated by decantation or filtration. Where expressed oil is used, care must be taken that the lime be first extracted, otherwise a soap of lime insoluble would be formed. The precipitate must then be dissolved in an acid, and the rough quinine be precipitated

by ammonia ; when in this state, it must be treated with oil several times, which will dissolve the quinine, and separate from it all matters foreign to the same. After obtaining the quinine in dissolution, by expressed or distilled oils, the oil is to be treated by water acidulated with an acid capable of forming a soluble salt with the quinine (I prefer hydrochloric acid) ; the acidulated water separates the quinine from the oil, the separation being easily effected by decantation, as the two liquids, having different specific weights, will not combine. The quinine, thus dissolved, is to be precipitated by an alkali, and, after that, it is reduced to sulphate by uniting it to sulphuric acid, care being taken to saturate and whiten by animal charcoal ; it is then crystallized by the method usually adopted. There is another mode of separating the quinine when dissolved in distilled oils ; this mode is by application of heat in any of the known ways used in the separation of liquids ; but this process I consider less advantageous, and I therefore prefer treating the oil by acidulated water. I claim as our invention, the production of sulphate of quinine, by the use of expressed or distilled oils, without the aid or intervention of, and as a substitute for, alcohol ; and I also claim the benefits to be derived or derivable therefrom."—*Rep. of Pat. Inv.*

Amputation of a Leg by Ligature.—A young husbandman, 24 years of age, was bitten in the posterior and inferior part of the leg by a viper. The sufferer, according to the custom of the country (Lithuania), placed above the wound, at four inches from the lower edge of the knee, a strong ligature of cord tightened by a small stick. The ligature remained unmoved from the 10th of June to the 23d July, the day on which the limb separated by sphacelation ; a violent hæmorrhage ensued ; the wound was oblique, and presented the shape of the beak of a clarionet, the point of which was in the direction of the anterior edge of the tibia. By the touch there might be observed, in the centre, osseous asperities, resulting from the solution of continuity of the bone—the fibula was necrosed in almost its whole course. The limb which had been separated was whole, and had lost scarcely one-third of its original volume. M. Delacoux attempts to explain this fact upon the consideration of the tightness of the ligature—the degree of constriction which it imposed—and the spongy state of the tibia, at that part of the bone where the ligature was applied —of the less degree of constitutional irritability of the inhabitants of the north, and of the youth of the patient. He thinks that the poison of the viper has had some share in inducing the sphacelation which the limb sustained. A similar case occurred in 1826. A young Greek, who was in the same way bitten in the leg by a serpent, tied a ligature round the limb, in order to prevent the absorption of the poison ; sphacelation followed, and terminated in the complete separation of the leg.—*Arch. Gén.*

Calcareous Concretions in the Spine.—M. Dupuy described the case of an ox, whose posterior limbs were paralyzed, mastication and rumination imperfect, and respiration short : the emaciation of the palsied parts was excessive. It was killed, and the lumbar spinal cord was found softened, the roots of the nerves arising therefrom, as it were, strangled, and the meninges thickened, and covered externally with yellowish calcareous concretions. Nothing was observed in the remainder of the cord or in the brain. This proves what has been supposed for thirty years past—

that the action and diseases of the spinal cord are not dependent on either the action or diseases of the brain. Electricity here would have been useless, as in the case of compression from hydatids, exostosis, &c.—*Ib.*

Action of Magnesia upon the Odorous Principles of Valerian.—M. Planche has observed that in a mixture of cinchona, valerian, and magnesia, the smell of the valerian is completely dissipated, and that the taste of this root is scarcely perceptible, whilst the aromatic odor and particular taste of the cinchona are perfectly evident. A few drops of sulphuric acid make the reddish yellow color of the mixture in a great measure disappear, and restore the strong characteristic odor of the valerian. It would hence seem that the magnesia forms a true combination with the odoriferous principles of the valerian; a combination which is decomposed by all the acids which have greater affinities for the magnesia than the principle in question (probably also of an acid nature). The observation of M. Planche is confirmed by the recent experiments of MM. Grotz and Pentz, who have concluded from their researches that there exists a peculiar acid in valerian, to which they have given the name *Valerianic Acid.* It is to this acid that the peculiar odor of all the pharmaceutic preparations made with valerian would appear to be owing.—*Revue Med.*

Fœtus found in the Abdomen of a Woman 78 years old.—M. J. Cloquet described, in the Academy of France, the case of a three months fœtus found in the abdomen of a woman of 78 years of age. It was situated in the centre of a cartilaginous tumor, which occupied the right side of the pelvis, and was attached to the bladder, to the vagina, and to the womb, by a very thick cellular tissue; thus being an example of extra-utero-peritoneal gestation. The occurrence of such cases in animals, he stated, was well authenticated. In cats, encysted tumors, containing well marked fœtuses, had been found attached to the vessels of the peritoneum only. In the human female, however, such cases are exceedingly rare, and with great difficulty authenticated.—*Ibid.*

Election in the French Institute.—M. Roux has been elected a member of the Academy of Sciences (subject to the approbation of the King), in the room of his late father-in-law, M. Boyer. His competitors were MM. Breschet, Lisfranc, and Velpeau.—*Lon. Med. Gaz.*

Division of the Symphysis Pubis.—M. Baudeloque has recently performed this operation with perfect success both to mother and child.

Whole number of deaths in Boston for the week ending April 18, 31. Males, 19—Females, 19.
Of lung fever, 2—croup, 1—inflammation in the bowels, 2—accidental, 2—pleurisy fever, 1—infantile, 3—cancer of the rectum, 1—consumption, 7—old age, 1—dropsy on the brain, 2—hooping cough, 1—worm fever, 1—convulsions, 1—drowned, 1—paralysis, 1. Stillborn, 1.

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